

Remarks/Discussion

The Art of Record

The primary reference was Published Patent Application 2002/0138487 to Weiss et al. for Method And System For Mapping And Searching The Internet And Displaying The Results In A Visual Form describes a method for carrying out a search of Web sites according to a search criteria. Weiss' method comprises the steps of (a) pre-indexing the sites of the Web, including grouping the Web sites according to predefined group-criteria; (b) pre-classifying each Web site according to a predefined set of properties; (c) pre-visual-formulating each Web site according to its identified properties; and (d) upon searching of Web sites that sustain a search criterion, displaying the formed site results divided into these pre-indexed groups where each site within a group is displayed according to its visual-formulation.

U.S. Patent 5,875,446 to Brown et al. for System And Method For Hierarchically Grouping And Ranking A Set Of Objects In A Query Context Based On One Or More Relationships describes a system for hierarchically ranking topically relevant objects in an object database. These topically relevant objects are first identified using generally known methods to obtain a set of topically relevant objects (topically relevant set). Parents, (including ancestors), of one or more of the topically relevant objects are identified according to directional structural relationships that the parents have with respect to the topically relevant objects. These objects form a set of structurally relevant objects (structurally relevant set). In some embodiments, the user query identifies one or more of these structural relationships. The topically relevant objects are then organized under one or more of their respective parents to form a hierarchy level of both (topically relevant and structurally relevant) sets of objects. The process can iterate to create more than one hierarchy level.

U.S. Patent 6,289,342 to Brown et al. for Autonomous Citation Indexing And Literature Browsing Using Citation Context describes an autonomous citation indexing system which can be used as an assistant agent to automate and enhance the task of finding publications in electronic form, including publications located on the world wide web. The system parses citations from papers and identifies citations to the same paper that may differ in syntax. The system also extracts and provides the context of citations to a given paper, allowing a researcher to determine what is published in other papers about a given paper. Common citations and word or string vector distance similarity are used to find related articles in a search.

U.S. Patent 6,665,659 to Logan for Methods And Apparatus For Distributing And Using Metadata Via The Internet describes a system for selectively distributing information from a multiplicity of Internet resources to a user in a way that make it easier for the user to quickly identify information of particular interest. The system of Logan et al. employs a server for generating a central library of citations, each containing metadata that describes selected information from a resource identified by a URL. The server works in conjunction with a client computer which requests information on a topic or topics of interest by supplying preference data to the server. In response, the server delivers a subset of the citations to the client computer which match the preference data from the client. The client computer places this subset of citations in a local store where they may be compared with user requests by matching the metadata in each citation to criteria specified by the user. In addition, the locally stored citations may be sorted into a particular order in response to a user request. The filtered and sorted citations may then be used to present desired information to the user, either by displaying metadata contained in the citation or by using the URL in the citation to fetch relevant information via the Internet from the original resource.

U.S. Patent 5,675,786 to Husick et al. for Accessing Data Held In Large Databases describes sampling the initial result of a query to the database, to

produce a sampled result which is substantially smaller than the initial result. The sampled result is easier to analyze statistically and is easier to transmit across a communications medium such as a network.

U.S. Patent 6,300,947 to Kanevsky for Display Screen And Window Size Related Web Page Adaptation System describes a web page adaptation system and method that provides organization of viewing material associated with web sites for visual displays and windows on which these home pages that are being viewed. A different viewing-access strategy is provided for such visual devices varying, for example, from standard PC monitors, laptop screens and palmtops to web phone and digital camera displays and from large windows to small windows. A new web site design incorporates features that permit automatic display of the content of home pages in the most friendly manner for a user viewing this content from a screen or window of a certain size. For example, if a size of a display screen or window allows, links are displayed with some text or pictures to which they are linked. Conversely, if a size of a screen or window does not allow display of all textual and icon information on a whole screen or window, the home page is mapped into hierarchically linked new smaller pages that fully fit the current display or window. The unique display strategy of the invention is provided by a web page adaptation scheme that is implemented on a web site server or is incorporated in a web browser (e.g., as a java applet) or both. This adaptation strategy employs variables that provide size of screen and/or window information from which a call to a web site was initiated.

The Office Action of June 30, 2005

The art was applied as shown in the Table below.

The primary reference, Weiss et al,¹ was variously applied with Brown², Lawrence³, and Logan⁴ as shown in the table below.

¹ [0008] Most other search Web applications are highly automated, sending "Spider" programs out on the Web around the clock to collect the text of Web pages. Spiders follow all the links on a page and put all the text into a database. Sometimes a Web site offers both--a search engine and directory capabilities.

[0031] Preferably, the set of properties comprises parameters relating to the site's importance, the nature of the site's owner, the existence of an e-store within the site, the existence of a "chat room" within the site, the existence of a forum within the site, the existence of multimedia file(s) and/or their amount and/or size within the site, the frequent used keywords in the textual data of the site, whether the site is "official", the essence of the site, and/or the amount of information in the site.

[0032] Preferably, the importance of a Web site is a function of the hyperlinks pointing to and from a Web site.

[0106] Marked as 101, is the process that is made by the searching facility that includes Clustering and Labeling. As a result, trees of Clusters are constructed. The Web sites of the Internet are scanned and the titles of the Web sites, the links and the addresses of the pages in which predefined keywords are found are stored in a database. Then, a Clustering algorithm is executed on the collected data in order to determine clusters. Then the detected Clusters are labeled by a Labeling process.

[0137] FIG. 7 schematically illustrates an example of a presentation of the results of the first stage of a search, according to a preferred embodiment of the invention. The search was for the phrase "Charlie's Angels". Optionally, the results are presented in a 2-D map on which the main clusters are displayed as continents: the Sport continent, the Entertainment continent, the Health continent, etc. The Clusters, in which the term "Charlie's Angels" appeared, are marked for the user. Of course alternatively this presentation can be a textual presentation or most preferably 3D presentation.

[0139] After selecting the Entertainment "continent" (the selection being carried out by clicking the selected object), the user is presented with the "countries"--TV series, Movies, Plays, Music, etc. Again, The countries, in which the search subjects have been found, are being marked to the user (see FIG. 8). The size of the "country" is proportional to the number of the Web sites of this entity.

[0147] a Spider program 22, for scanning the Web sites of the Internet;

[0148] a Database 24, for storing the information collected by the Spider program 22;

[0149] an Indexing application 23, for carrying out the clustering, labeling and classification of the Web sites. The indexing is a process, which is carried out independent of the search process, and its purpose is to organize all the Web sites of the Web prior to the search. For example, the indexing concerns organizing all the Web sites in clusters, classifying the Web sites according to predetermined properties, etc.; and

[0150] a Seeker application program/server 28 for interacting with the users 25, carrying out the search (by the appropriate queries to database 24) and for sending the results to the users 25 (usually as Web pages, which usually perform a visual presentation of user's Web browser).

Claim #1	102(e) - Weiss	103(a) Weiss in view of Brown	103(a) Weiss in view of Lawrence	103(a) Weiss in view of Logan
1	X			
2	X			
3	X			

[0155] According to an embodiment of the present invention, the Indexing 23 comprises the activities of Clustering, Labeling and Classification of the Web sites according to the predefined attributes, as described above. A Spider program 22 scans the Web sites of the Internet. The found Web sites are added to a database 24. By implementing Clustering method(s) a tree of Clusters is obtained. The gathered information (tree of Clusters, and the list of Web sites and their classification) is stored in database 24.

[0158] Then a query is posted from the system to database 24, and the results of the query are presented to the user. This stage is carried out by a Seeker program 32. The results of the search may be presented in a textual form or, but preferably in a graphical form described above (marked as 33). If the user is not satisfied with the search results, then the system may interview the user in order to focus the search, and the system posts a new query to the database 24.

² Column 4, lines 43-45:

An object of this invention is a system and method that generates a hierarchical grouping of topically and structurally relevant objects in a query context.

Column 16, lines 13-29:

The result of step 900 is a display of ranked hierarchies where children are shown grouped and indented under their parent. An example of such a display is shown in FIG. 13. FIG. 13 shows a sample output result of the system. The Figure shows the result of iterating step 635 once, such that a two level hierarchy is generated. The original topically relevant objects supplied in step 610 are displayed indented as 1320. The structurally relevant parent objects found after one iteration of step 635 are displayed non-indented as 1310. The parent objects 1310 form the next level of the hierarchical view, provide navigational starting points for browsing the relevant objects, and group the topically relevant child objects 1320. The display provides the end user with insight into the structure of the object collection being searched. Attributes for each of the objects shown in the display are obtained from the Object Catalog 210 and Attribute Tables 250.

³ For Figure 3, and its teaching of an "autonomous citation index system."

⁴ Column 1, lines 7-10:

This invention relates to electronic information distribution systems and more particularly to a method for indexing, combining, managing and distributing information via the Internet.

Column 5, lines 3-10:

The metadata which describes a particular resource need not be derived directly from that resource; for example, external resources which link to or which review a given resource may be used as a source of metadata which describes the given resource. By way of example, reviews or comments on a given Web site may be analyzed to develop an attribute value which quantifies the degree to which such comments and reviews were favorable or unfavorable.

4		X		
5		X		
6	X			
7	X			
8	X		X	
9	X			X
10				X
13	X			
14			X	
15			X	
16		X		
17		X		
18	X			
19	X			
20				X
21				X
22	X			
23			X	
24	X			
25		X		
26	X			
27				X